

Date: Mon, 3 Jan 94 00:33:08 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1536
To: Info-Hams

Info-Hams Digest Mon, 3 Jan 94 Volume 93 : Issue 1536

Today's Topics:

 Amateur Radio Newsline #855 31 Dec 93
 Daily Summary of Solar Geophysical Activity for 02 January
 Strange Antenna

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 02 Jan 1994 23:38:36 EST
From: library.ucla.edu!news.mic.ucla.edu!unixg.ubc.ca!nntp.cs.ubc.ca!alberta!
nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: Amateur Radio Newsline #855 31 Dec 93
To: info-hams@ucsd.edu

The electronic publication of the Amateur Radio Newsline is distributed
with the permission of Bill Pasternak, WA6ITF, President and Editor of
Newsline. The text is transcribed from the audio service by Dale Cary and
is first published on Genie.

Editorial comment or news items should be E-mailed to 3241437@mcimail.com
or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

All other information and disclaimers are in the text header below.

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NEWSLINE RADIO - CBBS EDITION #105 - POSTED 01/01/94

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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. The electronic version of newslines is posted on this CBBS twice monthly. For current information updates, please call

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Los Angeles..... (213) 462-0008
Los Angeles (Instant Update Line)..... (805) 296-2407
Seattle..... (206) 368-3969
Seattle..... (206) 281-8455
Tacoma..... (206) 927-7373
Louisville..... (502) 894-8559
Dayton..... (513) 275-9991
Chicago..... (708) 289-0423
New York City..... (718) 353-2801
Melbourne, FL..... (407) 259-4479

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For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

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For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You

NEWSLINE

Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY
KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN
and many others in the United States and around the globe!!!

[855]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory and is not for *
* air. Repeat, not for broadcast. This is just a reminder *
* that the address for the Newsline Support Fund is Newsline, *
* in care of Dr. Norm Chalfin, K6PGX, Post Office Box 463, *
* Pasadena, California 91102. Again, and as always, we thank *
* you. That ends the closed circuit with Newsline report 855 *
* for release on New Years Eve, Friday, December 31, 1993. *
* *
* *

*
* *
* The following is a QST *
* *
* New Jersey says it wants to tax every radio transmitter *
* in the state and some hams may try to grab 10 1/2 meters *
* from the freebanders. *
* *
* *

NEW JERSEY RF FEE

New Jersey, the state that two years ago tried to jail hams who had rigs in their cars and more recently tried to force Radio Shack to stop selling scanners with cellular coverage now wants to put a tax on every radio transmitter in the state! The New Jersey Department of Environmental Protection and Energy is proposing a fee on owners of almost all RF generating device. Transmitters that are both commercially and privately owned.

The proposed rule will require the owners of any source of radio frequency and microwave radiation between the frequencies of 300 KHz and 100 GHz and which have the potential of exposing

either workers or the general public to radiation levels in excess of the regulatory limits to register those sources with the Department within 60 calendar days after the effective date of this rule. The owners of all units that are subject to this rule shall be assessed an initial registration fee and will be required to provide technical information on each piece of equipment to the Department. After the first year of the program, the owners of registered units will be assessed an annual renewal fee. The amounts of the proposed fee are based on the services to be performed by the Department. As a reference, the median fee for commercial users will be approximately \$500 per antenna per year if this proposal is passed.

Radio frequency sources definitely falling under the proposed legislation include AM and FM radio stations, television stations, commercial microwave ovens, cellular telephone systems, radar installations, microwave point-to-point links, ground-to-satellite telecommunications links, and other communications services. Radio frequency and microwave sources are also widely used in industrial heating and sealing operations and will be included as well. Although fees are not yet outlined for Amateur Stations, ham radio is mentioned in several sections of the proposal as being a significant source of radio frequency radiation. A source that the state says poses health risks to the general public.

A hearing to discuss the rule will be held on January 11th in the Department's Public Hearing Room in Trenton, New Jersey. The Department will accept comments on the proposed regulations until January 20th. Comments should be addressed to Janis E. Hoagland, Esq., Administrative Practice Officer, New Jersey Department of Environmental Protection and Energy, Office of Legal Affairs, C N 402, Trenton, New Jersey, 08625-0402.

Those outside New Jersey aren't out of the clear on this issue. If this proposal passes into law, it could be justification for other states to take similar action. It might even lead to a national ruling on radio frequency radiation that could seriously damage the ability of Amateur Radio to fulfill the basis and purpose that it was created to serve. Newsline will keep you updated on this one.

TAKE BACK 11 METERS

If you are not on packet then you may not be aware that a growing number hams around the nation are sounding a call to arms. A call with the aim of taking part 11 meters back from Citizens Radio and turning it over to Novice and no-code Technician class hams.

No, its not a joke. In fact, those involved seem very serious

and are looking to do it the right way. The political way by petitioning the FCC to make the change.

The debate on this issue started a few weeks ago on packet when Tom Saluti, N1KIO of New Durham New Hampshire posted an All United States bulletin dealing with the subject. If you are active on packet then you are aware of the high level of support that Tom's idea has. For those of you who are not packeteers, heres the story.

In his posting, N1KIO called the 11 meter band -- more accurately the 10 1/2 meter Freeband as being -- and we quote -- a wasteland that even the government can't use. This Tom says is because operators have taken it over from 26.000 to 28.000 MHz and sometimes even make excursions into the 10 meter ham band.

He went on to note that with the FCC having taken away some frequencies from Amateur Radio that it might be time for them to give some spectrum back. This by abandoning their own efforts to handle the 10 1/2 meter problem and turn 27.500 to 28.000 over to the Amateur Radio service. He says that radio amateurs can easily solve the mess by permitting Novices and Techs to run CW and data from 27.500 to 27.700 and voice operation from 27.700 to 28.000 MHz.

Since its posting, the N1KIO bulletin has been highly controversial. Not over the idea of running the illegal operators off of 11 meters and getting it reassigned as a ham radio band. Almost every commenter wants to see that happen. The problem seems to be on how to do it.

Many hams appear have a high level animosity toward the Freeband illegals but a number question how to get the FCC to take the request seriously. One responses gaining a lot of support suggests that a petition be circulated by packet radio where signatures and call signs could be added. Then, after a few months a final print out can be sent to the Private Radio Bureau as a rule making request.

No matter what the outcome of the discussion going on packet, one thing is certain. A fire is being fanned by a desire of no-code hams to have access to the high frequency bands. It is growing, and the illegal operators on 10 1/2 meters may soon find hot cinders falling in their self proclaimed Freeband as radio amateurs take a political route to oust the current crop of illegal operators and open 10 1/2 meters to ham radio. Stay tuned.

PARAMOUNT FINED

Much of the FCC's staff is away on vacation, so there is nothing new in the case of alleged violations of Amateur Radio testing rules by a number of Southern California Volunteer

Examiners. But before the commission went into recess, it did levi a big fine against a Houston, Texas television station.

The Federal Communications Commission has fined Paramount Communications television station KTXH-TV in Houston, Texas \$80,000 for violating a law limiting the number of commercials a TV station may air during children's programming hours.

The fine represents the largest punishment ever handed out to a TV station since Congress passed a 1990 law requiring broadcasters to meet the educational needs of children. An appeal by Paramount is expected.

RADIATION PROOF IC's NEEDED

Keith Baker, KB1SF of AMSAT North America says that the Phase 3D satellite development team has identified an urgent need for some radiation hardened, low power CMOS type 1802 microprocessor chips. These are not the standard off the shelf variety of 1802's, but rather the type that have been certified for operation in a spacecraft environment. If any of our listeners has source or pricing information on these components, please drop a note to Dick Jansson WD4FAB at his callbook address or fax him at 407-644-9782. These IC's are needed to make the new Phase 3D satellite fly!

NO 222 - 222.150 MHZ LISTINGS

When the next issue of the ARRL's Repeater Directory premieres in April, there will be no listings of repeaters that may still be operating between 222 and 222.150 MHz. Newsline has learned that the decision to drop the listing of repeaters operating in that 150 Khz window is based on a recent FCC rules change. A change that reserves that spectrum for weak signal operations by barring any and all relay operation from it.

Once implemented, any repeater or remote base venturing into the band between 222 and 222.150 MHz will be in violation of the FCC rules. The operators of such systems will be subject to severe penalties if they are caught. Apparently the ARRL does not to be viewed as fostering pirate repeater operations. The decision to drop these systems from public listing seems to be its way to make this position known.

THIS WEEK IN AMATEUR RADIO RETURNS

A satellite delivered ham radio program is returning to the air after being homeless for just over a month. Producers of

"This Week in Amateur Radio" say they're back, but on a different satellite.

Community Video Associates, which produces the program, says it has reached an agreement to get the show back on the air starting January 1st. This Week In Amateur Radio began airing in March. It lasted till late November when the program lost its satellite air time. George Bowen, N2LQS is the CVA's President. He says the program will air on the Galaxy III satellite under an agreement with the new Omega Radio Network. Air times will be Saturday at 7:30pm EST. Bowen says the network is donating the satellite time as a service to the amateur radio community. This Week In Amateur Radio carries a variety of ham programing including Amateur Radio Newslite. The show is free and available for rebroadcast on local amateur radio repeaters.

If you'd like to listen to This Week in Amateur Radio, here's more information on the Galaxy III satellite. Tune in transponder 19, 5.8 MHz wideband audio. Galaxy III is located at 93.5 degrees west longitude. Again, air times are Saturdays, starting at 7:30 p.m., Eastern time. Welcome back!

NEW RAIN DIAL UP SERVICE PHONE NUMBER

Chicago's popular Rain Dial Up Service has changed its telephone number. As of Thursday December the 30th, the new number is area code (708) 827-7246. The Rain dial up provides repeaters and other bulletin stations with in depth reports on subjects of contemporary interest to the ham community. Again the new number is area code (708) 827-7246 or simply (708) 827-RAIN.

AMATEUR RADIO INDUSTRY GROUP TO HOLD FIRST MEETING OF '94

The Amateur Radio Industry Group will hold its first formal planing meeting of 1994 on Friday evening, February 4, at the Miami Airport Mariott Hotel, Miami, Florida in conjunction with the 34th annual Tropical Hamboree. All manufacturers, publishers, importers and dealers serving the ham radio marketplace are invited to attend. The Meeting room number will be posted in the hotel lobby and circulated among all exhibitors at the Hamboree. Sorry, this meeting is not open to the general public. For more information or to arrange to make a presentation at the meeting please contact John Dorr, K1AR, Chairman of the Amateur Radio Industry Group, at CQ Communications, 76 North Broadway, Hicksville, New York 11801. John can be reached by telephone at area code (516) 681-2922 or you can Fax him at (516) 681-2926.

CZECH OPERATION

In DX, word that a station signing OL1A and claiming to be operating in the Czech Republic had been rumored to be a pirate. Now comes word from W9GSB who says that's definitely not the case. Lou reports that he has received a card for the operation. OL1A turned out to be a special contest station operated by OK1DFP and several others. If you also made the contact, QSL via OK1DWX.

DXCC UPDATE

The ARRL has announced that A61AF cards are acceptable for DXCC credit, but only for QSO dates after August 3rd, 1993. The League says that all operations prior to that date were unauthorized, and not good for DXCC. If you were among the many who submitted an A61AF card prior to November 16th, 1993 you are going to have to resubmit. This is because all prior A61AF credits have been removed from the League's DXCC database.

ARRL RTTY CONTEST

A reminder that the annual ARRL RTTY Roundup takes place next weekend from 18:00 UTC on January 8th to 24:00 UTC on January the 9th. According to W1FB there were two date announcements made for the contest. The official notice in QST listed the correct date while the announcement in CQ Magazine that the competition would be held New Years weekend was wrong.

ORIGINAL MARCONI KITES DISCOVERED

Joe Chamberlin, VE3ABG reports via packet that some of the original kites used in the early 1900's by radio pioneer Guglielmo Marconi have been found. The kites were discovered during a recent Marconi plant clean-up in Montreal. Plans are to donate some of the kites to the Marconi Museum in St. John's, Newfoundland. This is where early trans-Atlantic transmissions took place from Signal Hill. VE3ABG also says that contrary to rumors going around, the Marconi company officials do not plan on offering them up for public auction.

For this year, that's all from the Amateur Radio Newsline.
You can write to us at Post Office Box 463 in Pasadena, CA 91102.

From Bill Pasternak, WA6ITF at our editors desk, and all the
rest of the Newsline staff around the world, we wish you a great
1994.

* * * Newsline Copyright 1993 & 1994, all rights are reserved. * * *

Date: Sun, 2 Jan 1994 21:45:45 MST
From: library.ucla.edu!news.mic.ucla.edu!unixg.ubc.ca!nntp.cs.ubc.ca!alberta!
nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 02 January
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

02 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 02 JANUARY, 1994

NOTE: Intense stratospheric warming continues over central and northeastern
Siberia, Alaska, Northern Canada and the Siberian and Canadian Arctic.
Temperature gradient is reversed between 60N and the pole from 50 HPA
upwards into the upper stratosphere.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 002, 01/02/94
10.7 FLUX=146 90-AVG=100 SSN=094 BKI=1343 4312 BAI=014
BGND-XRAY=B6.0 FLU1=1.0E+06 FLU10=1.1E+04 PKI=2343 4332 PAI=016
BOU-DEV=008,025,045,030,062,021,007,013 DEV-AVG=026 NT SWF=01:015
XRAY-MAX= M6.5 @ 2256UT XRAY-MIN= B5.4 @ 1554UT XRAY-AVG= C1.2
NEUTN-MAX= +003% @ 0155UT NEUTN-MIN= -004% @ 0305UT NEUTN-AVG= +0.0%
PCA-MAX= +0.1DB @ 0920UT PCA-MIN= -0.8DB @ 0130UT PCA-AVG= -0.2DB
BOUTF-MAX=55350NT @ 0507UT BOUTF-MIN=55324NT @ 1852UT BOUTF-AVG=55338NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+053,+000,+000
GOES6-MAX=P:+111NT@ 1835UT GOES6-MIN=N:-067NT@ 0726UT G6-AVG=+077,+028,-038
FLUXFCST=STD:140,135,130;SESC:140,135,130 BAI/PAI-FCST=010,005,005/012,008,008
KFCST=1223 4321 0123 4221 27DAY-AP=006,015 27DAY-KP=2112 2221 3112 5434

WARNINGS=*MAJFLR;*SWF

ALERTS=**MAJFLR:M6.5/SN@2256,N13E15(7645)

!!END-DATA!!

NOTE: The Effective Sunspot Number for 01 JAN 94 was 67.0.

The Full Kp Indices for 01 JAN 94 are: 3+ 3+ 4o 5+ 4o 3o 2- 2+

SYNOPSIS OF ACTIVITY

Solar activity was low. Only a few C-class subflares occurred. Regions 7645 (N12E18) and 7646 (S09E14), both about 600 millionths in area, have been stable. Little else of significance was reported.

STD: A relatively insignificant major M6.5/SN flare erupted out of Region 7645 at 02/2256Z. The flare was rather impulsive and was not associated with any notable radio emissions.

Additional M-class flares are possible from this region, with an outside chance for an isolated X-class event. It continues to show a fairly complex magnetic structure. A delta configuration is also still quite evident within the region.

Solar activity forecast: solar activity is expected to be low.

The geomagnetic field was at quiet to active levels.

Geophysical activity forecast: the geomagnetic field is expected to be quiet to unsettled throughout the period.

Event probabilities 03 jan-05 jan

Class M	25/25/25
Class X	01/01/01
Proton	01/01/01
PCAF	Green

Geomagnetic activity probabilities 03 jan-05 jan

A. Middle Latitudes

Active	30/20/20
Minor Storm	10/10/10
Major-Severe Storm	01/01/01

B. High Latitudes

Active	20/20/20
--------	----------

Minor Storm 30/30/20
Major-Severe Storm 01/01/01

HF propagation conditions were normal over all regions. Ionospheric strengthening is evident. Openings on 6 meters are becoming increasingly possible over some middle and many lower latitude regions. High latitudes are also observing somewhat better propagation conditions, although some night-sector signal instabilities are persisting. The major M6.5/SF flare had only a minor ionospheric impact on daylight paths. The short duration of the flare prevented a strong and lasting SWF. Similar conditions are expected over all regions during the next 3 days. Additional sudden ionospheric disturbances (SIDs) are possible over the next week.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 02/2400Z JANUARY

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7645	N12E18	082	0600	FKI	16	032	BETA-GAMMA-DELTA	
7646	S09E14	086	0580	DKI	10	023	BETA	
7647	S15E06	094	0120	DAO	07	009	BETA	

REGIONS DUE TO RETURN 03 JANUARY TO 05 JANUARY

NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 02 JANUARY, 1994

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
0229	0236	0240			C1.5			360	
1139	1149	1155			C1.1			110	
2248	2256	2303	7645	N13E15	M6.5	SN		100	

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 02 JANUARY, 1994

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
NO EVENTS OBSERVED								

INFERRED CORONAL HOLES. LOCATIONS VALID AT 02/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS

EAST	SOUTH	WEST	NORTH	CAR	TYPE	POL	AREA	OBSN
------	-------	------	-------	-----	------	-----	------	------

55 S10W73 S10W73 N20W83 N20W83 184 ISO POS 008 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
01 Jan:	0016	0158	0208	C2.8						
	0120	0120	0123		SF	7640	N08W78			
	0156	0158	0202		SF	7640	N08W79			
	0157	0158	0216		SF	7646	S09E39			
	0323	0326	0329	C1.8	SF	7645	N13E35			
	0335	0341	0350	C2.4						
	0550	0555	0603	C2.0	SF	7640	N06W77			
	0557	0600	0606		SF	7646	S09E37			
	0750	0754	0758	C1.2						
	1219	1223	1226	C1.5	SF	7645	N10E36		51	94
	1254	1259	1302	C1.6						
	1341	1348	1353	C1.7						
	1540	1609	1649	C2.0						
	1735	1745	1800	C4.4	SF	7647	S15E27			
	2311	2315	2319	C1.3				34	140	350

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
Region 7640:	1	0	0	3	0	0	0	0	003	(20.0)
Region 7645:	2	0	0	2	0	0	0	0	002	(13.3)
Region 7646:	0	0	0	2	0	0	0	0	002	(13.3)
Region 7647:	1	0	0	1	0	0	0	0	001	(6.7)
Uncorrelated:	7	0	0	0	0	0	0	0	007	(46.7)

Total Events: 015 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
01 Jan:	2311	2315	2319	C1.3				III

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max,

and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

** End of Daily Report **

Date: Mon, 03 Jan 1994 05:08:29 GMT
From: swrinde!cs.utexas.edu!howland.reston.ans.net!usenet.ins.cwru.edu!
neoucom.edu!wtm@network.ucsd.edu
Subject: Strange Antenna
To: info-hams@ucsd.edu

In article <2g83sh\$8p2@agate.berkeley.edu> ep208@garnet.berkeley.edu (Charles Woodson) writes:

>The antenna looked like a loop about 3 cm in diameter, and there was
>a second loop the same size at 90 degrees to the first one.

That sounds like a cellular antenna to me. The last time I dropped by my cellular carrier's office to pick up a quick charger for my Moto hand-held unit, I noticed some antennae on display. One of those was a very short stalk with two vertical loops perpendicular to each other, passing though the axis of the stalk.

Tehre wasn't really anything on the display that would suggest that said antenna was any better than any of the others, just different. In fact, it was not the most expensive on display. The most costly was a hinged model that mounts on the trunk lid. When not in use, it could be folded out of sight under the trunk lid. It was pretty large and looked more CB-like than cellular. Still, not a bad idea.

--

Bill Mayhew NEOUCOM Computer Services Department
Rootstown, OH 44272-9995 USA phone: 216-325-2511
wtm@uhura.neoucom.edu amateur radio 146.58: N8WED

Date: 2 Jan 94 21:25:41 PDT
From: news.sprintlink.net!crash!cmkrnl!jeh@uunet.uu.net
To: info-hams@ucsd.edu

References <CIzLwp.7zJ@efn.org>, <2g7eua\$epl@reznor.larc.nasa.gov>,
<2g7p56\$9s9@crl2.crl.com>
Subject : Re: why 29.94 fps?

In article <2g7p56\$9s9@crl2.crl.com>, lreeves@crl.com (Les Reeves) writes:
> The colorburst frequency is not only cast in stone-it is extremely accurate.
> It is more accurate as a frequency reference than WWV. This is provided
> that you are tuned to a network-supplied program.

Is this still true?

I have no direct knowledge, but... many years ago (mid-70's if I remember right) one of the hobby electronics mags (I think it was Radio-Electronics) had an article for a frequency standard derived from a color tv. Soon afterward a letter appeared in the letter column (where else :-), written by an engineer at one of the better-equipped stations in L.A. He stated that even network-supplied programs taken from a live feed usually go through a time-base corrector at the local station, and that this breaks the "chain of traceability" back to the network's precision frequency standard.

(of course, anything that the local taped from a satellite feed for broadcast later is completely divorced from any standards at the network.)

Also, at that time it was stated that the networks used rubidium-clock frequency standards, which are secondary standards: They're awfully good but they still have to be calibrated against something better. NIST (the folks who run WWV) uses cesium-beam clocks, which are primary standards, needing no calibration for frequency. Have the networks since upgraded to cesium-beam clocks? And, given that the local stations probably haven't, does it matter anyway? Even if they have, they're still "only" as good as NIST's clocks, so why should one over-the-air signal be better than another? (propagation changes on shortwave, maybe?)

--- Jamie Hanrahan, Kernel Mode Systems, San Diego CA
Internet: jeh@cmkrnl.com (JH645) Uucp: uunet!cmkrnl!jeh CIS: 74140,2055

End of Info-Hams Digest V93 #1536
